

							5	Sheet 1 of	
U.S. Depa	artment	of Commerce, Pa	tent and Traden	nark Office	Docke	t No.	Serial	No.	
(PTO For	m 1449	modified)			AMAT	/5730	10/02	3,125	
LIST OF I	PATEN	TS AND PUBLIC	ATIONS CITED	BY APPLICANT	Applic	ant			
			/ 0	6 %	Y00, 6	et al.			
(Use seve	ral she	ets if necessary)	APR (3 2002 🛱	Filing	Date	Group)	
		Examiner Uni	known	<u> </u>	Decer	nber 17, 200	01 Unkno	wn	
U.S. Pate	nt Doc	uments	\$ TRA	DEMARIE				-	
*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclas	s Filing Da		
/F.S./	A1	4,058,430	11/15/77	Suntola et al.	156	611	11/25/1	975	
/F.S./	A2	4,389,973	06/28/83	Suntola et al.	118	725	12/11/1	981	
F.S./	АЗ	4,413,022	11/01/83	Suntola et al.	427	255.2	06/21/1	979	
/F.S./	A4	4,486,487	12/04/84	Skarp	428	216	04/25/1	983	
/F.S./	A5	4,767,494	08/30/88	Kobayashi et al	156	606	09/19/1	986	
/F.S./	A6	4,806,321	02/21/89	Nishizawa et al.	422	245	07/21/1	985	
/F.S./	A7	4,829,022	05/09/89	Kobayashi et al	437	107	12/09/1	12/09/1986	
F.S./	A8	4,834,831	05/30/89	Nishizawa et al.	156	611	09/04/1	09/04/1987	
/F.S./	A9	4,838,983	06/13/89	Schumaker et al.	156	613	03/18/1	988	
F.S./	A10	4,838,993	06/13/89	Aoki et al.	156	643	12/03/1	987	
F.S./	A11	4,840,921	06/20/89	Matsumoto	437	89	06/30/1	988	
/F.S./	A12	4,845,049	07/04/89	Sunakawa	437	81	03/28/1	988	
/F.S./	A13	4,859,625	08/22/89	Nishizawa et al.	437	81	11/20/1	11/20/1987	
Foreign F	atent	Documents							
*Examiner Initial		Document Number	Date	Country	Class	Subclass	Trans YES	slation NO	
/F.S./	B1	01/66832 A2	09/13/2001	wo	C30B	16/44		X	
/F.S./	B2	01/40541 A1	06/07/2001	wo	C23C	16/40		X	
/F.S./	В3	01/36702 A1	05/25/2001	wo	C23C	16/00		х	
/F.S./	B4	01/29893 A1	04/26/2001	wo	H01L	21/768		х	
/F.S./	B5	01/29891 A1	04/26/2001	wo	H01L	21/768		Х	
OTHER A	RT			-				-	
Examiner Initial		Including Author,	Title, Date, Pertine	ent Pages, Etc.					
/F.S./	C1	Hultman, et al., "Rev Metallkunde, 90(10)		and mechanical stabili 3-813.	y of TiN-ba	sed thin films"	, Zeitschrift Fu	7	
/F.S./	C2	Klaus, et al., "Atomic Surface Review & L		of SiO₂ Using Catalyze i), pp. 435-448.	d and Unca	atalyzed Self-L	imiting Surface	Reactions	
Examiner	/F	rancis Smith/			Date 0	Considered	12/18/2007		

U.S. Depa	ırtment	of Commerce, Pate	ent and Tradem	ark Office	Docket	No.	Serial	No.		
(PTO For	n 1449	modified)		_	AMAT/5	730	10/02:	3,125		
LIST OF F	PATEN	TS AND PUBLICA	TIONS CITED	Y APPLICANT	Applica	Applicant				
				~~~	Yoo, et	al.				
(Use seve	ral she	ets if necessary)	1	R 0 3 2002 8	Filing D	ate	Group			
		Examiner Unkr	nown	THADRAMARIE	Decemb	oer 17, 2001	Unkno	wn		
U.S. Pate	nt Doc	uments	-	THADENAM						
*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Da Appropri			
/F.S./	A14	4,859,627	08/22/89	Sunakawa	437	81	07/01/1	988		
/F.S./	A15	4,861,417	08/29/89	Mochizuki et al.	156	610	03/24/1	988		
/F.S./	A16	4,876,218	10/24/89	Pessa et al.	437	107	09/26/1	988		
/F.S./	A17	4,927,670	05/22/1990	Erbil	427	255.3	06/22/19	988		
/F.S./	A18	4,931,132	06/05/90	Aspnes et al.	156	601	10/07/19	988		
/F.S./	A19	4,960,720	10/02/90	Shimbo	437	105	08/24/19	987		
/F.S./	A20	4,975,252	12/04/90	Nishizawa et al	. 422	245	05/26/1989			
/F.S./	A21	4,993,357	02/19/91	Scholz	118	715	12/21/19	989		
/F.S./	A22	5,013,683	05/07/91	Petroff et al.	437	110	01/23/19	989		
/F.S./	A23	5,082,798	01/21/92	Arimoto	437	108	09/27/19	990		
/F.S./	A24	5,085,885	02/04/92	Foley et al.	477	38	09/10/19	990		
/F.S./	A25	5,091,320	02/25/92	Aspnes et al.	437	8	06/15/19	990		
/F.S./	A26	5,130,269	07/14/92	Kitahara et al.	437	111	04/25/19	989		
/F.S./	A27	5,166,092	11/24/92	Mochizuki et al.	. 437	105	10/30/19	990		
Foreign F	atent l	Documents								
*Examiner Initial		Document Number	Date	Country	Class	Subclass	Trans	lation		
		Number					YES	NO		
/F.S./	В6	01/29280 A1	04/26/2001	wo	C23C	16/32		Х		
/F.S./	B7	01/27347 A1	04/19/2001	wo	C23C	16/44		Х		
/F.S./	B8	01/27346 A1	04/19/2001	wo	C23C	16/44		X		
/F.S./	B9	01/15220 A1	03/01/2001	wo	H01L	21/768		X		
OTHER A	RT									
*Examiner Initial		Including Author, Tit								
/F.S./	СЗ	Yamaguchi, et al., "Ate content", Appl. Surf. S	ci., Vol. 130-132 (1	1998), pp. 202-207.						
/F.S./	C4	George, et al., "Surfac	e Chemistry for Ato	omic Layer Growth",						
Examiner		Francis Smith/				onsidered 1				
		f reference considered, t considered. Include co					through cita	tion if not in		

U.S. Depa	rtment	of Commerce, Pate	ent and Trader	nark Office	Docket	No.	Serial	No.		
(PTO Forr					AMAT/	AMAT/5730 10/023,125				
LIST OF F	ATEN	TS AND PUBLICAT	TIONS CITED	BY APPLICANT	Applica	ant				
				11.87	Yoo, e	t al.				
(Use seve	ral she	ets if necessary)	APR	0 3 2002 8	Filing [	Date	Group	'		
		Examiner Unkr			Decem	ber 17, 2001	Unkno	wn		
U.S. Pater	nt Doc	uments	(A)	PADEMAN Applicant(s)						
*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Da Appropri			
/F.S./	A28	5,225,366	07/06/93	Yoder	437	108	06/22/1	990		
/F.S./	A29	5,246,536	09/21/93	Nishizawa et al.	156	610	03/10/19	989		
/F.S./	A30	5,250,148	10/05/93	Nishizawa et al.	156	611	11/12/19	991		
/F.S./	A31	5,254,207	10/19/93	Nishizawa et al.	156	601	11/30/19	992		
/F.S./	A32	5,256,244	10/26/93	Ackerman	156	613	02/10/19	992		
/F.S./	A33	5,270,247	12/14/93	Sakuma et al.	437	133	07/08/1992			
/F.S./	A34	5,278,435	01/11/94	Van Hove et al.	257	184	06/08/1	992		
/F.S./	A35	5,281,274	01/25/94	Yoder	118	697	02/04/1	993		
/F.S./	A36	5,290,748	03/01/94	Knuuttila et al.	502	228	07/16/1	992		
/F.S./	A37	5,294,286	03/15/94	Nishizawa et al	156	610	01/12/1	993		
/F.S./	A38	5,296,403	03/22/94	Nishizawa et al	437	133	10/23/1	992		
/F.S./	A39	5,300,186	04/05/94	Kitahara et al.	156	613	04/07/1	04/07/1992		
/F.S./	A40	5,311,055	05/10/94	Goodman et al.	257	593	11/22/1	991		
Foreign P	atent	Documents								
*Examiner		Document	Date	Country	Class	Subclass	Trans	lation		
Initial		Number		·			YES	NO		
/F.S./	B10	00/79576 A1	12/28/2000	wo	H01L	21/205		Х		
/F.S./	B11	00/79019 A1	12/28/2000	wo	C23C	16/00		X		
/F.S./	B12	00/63957 A1	10/26/2000	wo	H01L	21/205		X		
OTHER A	RT									
*Examiner Initial		Including Author, Tit								
/F.S./	C5	George, et al., "Aton sequence chemistry	", Appl. Surf. Sc	i., Vol. 82/83 (1994)	, pp. 460-	467.				
/F.S./	C6	Wise, et al., "Diethyl Symp. Proc., Vol. 33	diethoxysilane a 34 (1994), pp. 3	as a new precursor 17-43.	for SiO₂ gr	owth on silicor				
Examiner	/	rancis Smith/			Date C	Considered	12/18/200	7		



					•		S	Sheet 4 of		
U.S. Depar	tment o	f Commerce, Pa	tent and Trade	mark Office	Docke	t No.	Serial			
(PTO Form					AMAT	/5730	10/02:	3,125		
LIST OF P	ATENT	S AND PUBLICA	ATIONS CITE	BYAPPLICANT	Applic	ant				
			/0	IPE	Y00, 6	t al.				
(Use sever	al sheet	s if necessary)		98 0 3 2002 88	Filing	Date	Group			
	1	Examiner Uni	, ,	143	Decer	nber 17, 2001	Unkno	wn		
U.S. Paten	t Docui	ments	(A)	Applicant(s)						
*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Da Appropri			
/F.S./	A41	5,316,615	05/31/94	Copel	117	95	03/09/1	993		
/F.S./	A42	5,316,793	05/31/94	Wallace et al.	427	248.1	07/27/1992			
/F.S./	A43	5,330,610	07/19/94	Eres et al.	117	86	05/28/1	993		
/F.S./	A44	5,336,324	08/09/94	Stall et al.	118	719	12/04/19	991		
/F.S./	A45	5,338,389	08/16/94	Nishizawa et al.	. 117	89	04/21/19	993		
/F.S./	A46	5,348,911	09/20/94	Jurgensen et al	. 117	91	04/26/1993			
F.S./	A47	5,374,570	12/20/94	Nasu et al.	437	40	08/19/1993			
/F.S./	A48	5,395,791	03/07/95	Cheng et al.	437	105	10/20/19	993		
/F.S./	A49	5,438,952	08/08/1995	Otsuka	117	84	01/31/1	994		
/F.S./	A50	5,439,876	08/08/95	Graf et al.	505	447	08/16/1993			
/F.S./	A51	5,441,703	08/15/95	Jurgensen	422	129	03/29/1994			
/F.S./	A52	5,443,033	08/22/95	Nishizawa et al	. 117	86	03/11/19	994		
/F.S./	A53	5,443,647	08/22/95	Aucoin et al.	118	723 ME	07/11/1994			
/F.S./	A54	5,455,072	10/03/95	Bension et al.	427	255.7	11/18/1	992		
Foreign Pa	tent Do	ocuments	0				9			
*Examiner		Document	Date	Country	Class	Subclass	Trans	lation		
Initial		Number					YES	NO		
/F.S./	B13	00/54320 A1	09/14/2000	wo	H01L	21/44		X		
/F.S./	B14	00/16377 A2	03/23/2000	wo	H01L			X		
/F.S./	B15	00/15881 A2	03/23/2000	wo	C30B			Х		
/F.S./	B16	00/15865 A1	03/23/2000	wo	C23C	16/00		x		
OTHER AF	RT.									
*Examiner Initial		Including Author	, Title, Date, Pe	rtinent Pages, Etc.						
/F.S./	C7			de thin films and over Vol. B41 (1996), pp. 2		atomic layer ep	itaxy for ad	vanced		
Examiner	/Fi	rancis Smith/			Date (	Considered	12/18/200	7		

· Sheet 5 of 10

U.S. Depar	tment o	f Commerce, Pat	ent and Traden	nark Office	Docke	t No.	Seria	Serial No.	
(PTO Form					AMAT	/5730	10/02	3,125	
LIST OF PA	ATENTS	S AND PUBLICA		BY APPLICANT	Applic	ant			
				PE	Yoo, e	t al.			
(Use sever	al sheet	s if necessary)	ADD O	3 2002 👸	Filing	Date	Group	0	
	E	Examiner Unk			Decen	nber 17, 20	01 Unkn	own	
U.S. Paten	t Docur	nents	Issue	DCMARIE C					
Examiner nitial		Document Number	Issue Date	Applicant(s) Name	Class	Subcla	Filing Da Appropr		
/F.S./	A55	5,458,084	10/17/95	Thorne et al.	117	89	12/09/1	993	
/F.S./	A56	5,469,806	11/28/95	Mochizuki et al	. 117	97	08/20/1	993	
/F.S./	A57	5,480,818	01/02/96	Matsumoto et al.	437	40	02/09/1	993	
/F.S./	A58	5,483,919	01/16/96	Yokoyama et al.	117	89	08/17/1	994	
/F.S./	A59	5,484,664	01/16/96	Kitahara et al.	428	641	01/21/1	994	
/F.S./	A60	5,503,875	04/02/96	Imai et al.	427	255.3	03/17/1	994	
/F.S./	A61	5,521,126	05/28/96	Okamura et al.	437	235	06/22/1	994	
/F.S./	A62	5,527,733	06/18/96	Nishizawa et al	. 437	160	02/18/1	994	
/F.S./	A63	5,532,511	07/02/96	Nishizawa et al	. 257	627	03/23/1	995	
/F.S./	A64	5,540,783	07/30/96	Eres et al.	118	. 725	05/26/1	994	
/F.S./	A65	5,601,651	02/11/97	Watabe	118	715	12/14/1	994	
/F.S./	A66	5,616,181	04/01/97	Yamamoto et al.	118	723 EI	11/21/1	995	
/F.S./	A67	5,637,530	06/10/97	Gaines et al.	114	105	06/10/1	06/10/1996	
oreign Pa	tent Do	cuments							
Examiner		Document	Date	Country	Class	Subclass	Tran	slation	
nitial		Number					YES	NO	
F.S./	B17	99/41423 A2	08/19/1999	wo	C23C			X	
/F.S./	B18	99/29924 A1	06/17/1999	wo	C23C	16/04		X	
F.S./	B19	99/01595	01/14/1999	wo	C30B	25/14		X	
/F.S./	B20	96/18756 A1	06/20/1996	wo	C23C	16/08		X	
OTHER AF	RT								
Examiner nitial		-	, Title, Date, Perti						
/F.S./	C8	Vapor Deposition	n, Vol. 5(1) (Janu	TiN and Al₂O₃ films ary 1999), pp. 7-9.					
/F.S./	C9	Klaus, et al., "Ato reactions". Appl.	omically controlled Surf. Sci., Vol 16	d growth of tungste 2-163 (2000), pp. 4	n and tung 179-491.	sten nitride	using sequen	tial surface	
Examiner	/F	rancis Smith/			Date 0	Considered	12/18/200	7	

U.S. Depar	tment o	f Commerce, Pat	ent and Trade	mark Office	_ Docke	t No.	Serial	No.			
(PTO Form					AMAT	5730	10/023	3,125			
LIST OF P	ATENT	S AND PUBLICA	TIONS CITED	BY APPLICANT	Applica	Applicant ·					
			/0	11.8	Y00, e	t al.					
(Use sever	al sheet	ts if necessary)	AP.	R 0 3 2002	Filing [	Filing Date Group					
	1	Examiner Unk	nown 🗽	81	Decem	ber 17, 200	1 Unkno	wn			
U.S. Paten	t Docui	ments	K KAN	TRADEMINE							
*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclas	s Filing Da Appropri				
/F.S./	A68	5,641,984	06/24/97	Aftergut et al.	257	433	08/19/19	994			
/F.S./	A69	5,644,128	07/01/97	Wollnik et al.	250	251	08/25/19	994			
/F.S./	A70	5,693,139	12/02/97	Nishizawa et al.	. 117	89	06/15/19	993			
/F.S./	A71	5,705,224	01/06/98	Murota et al.	427	248.1	01/31/19	995			
/F.S./	A72	5,707,880	01/13/98	Aftergut et al.	437	3	01/17/19	997			
/F.S./	A73	5,711,811	01/27/98	Suntola et al.	118	711	11/28/19	11/28/1995			
/F.S./	A74	5,730,802	03/24/98	Ishizumi et al.	118	719	12/27/19	996			
/F.S./	A75	5,747,113	05/05/98	Tsai	427	255.5	07/29/19	996			
/F.S./	A76	5,749,974	05/12/98	Habuka et al.	118	725	07/13/19	995			
/F.S./	A77	5,796,116	08/18/98	Nakata et al.	257	66	07/25/19	995			
/F.S./	A78	5,807,792	09/15/98	llg et al.	438	758	12/18/19	996			
/F.S./	A79	5,830,270	11/03/98	McKee et al.	117	106	08/05/19	996			
/F.S./	A80	5,835,677	11/10/98	Li et al.	392	401	10/03/19	996			
Foreign Pa	tent Do	ocuments									
Examiner		Document	Date	Country	Class	Subclass	Trans	lation			
Initial		Number					YES	NO			
/F.S./	B21	96/17107 A1	06/06/1996	wo	C23C	16/44		Х			
/F.S./	B22	93/02111 A1	02/04/1993	wo	C08F	4/78		Х			
/F.S./	B23	91/10510 A1	07/25/1991	wo	B01J	37/02		Х			
/F.S./	B24	0 799 641 A2	10/08/1997	EP	B01J	20/32		Х			
OTHER AF	RT.										
Examiner Initial		Including Author,	Title, Date, Pe	rtinent Pages, Etc.							
/F.S./	C10	NH/sub3/", Symp	Min, et al., "Atomic layer deposition of TiN thin films by sequential introduction of Ti precursor and NH/sub3/", Symp:: Advanced Interconnects and Contact Materials and Processes for Future Integrated Circuits (Apr. 13-16, 1998), pp. 337-342.								
Examiner	/Fr	ancis Smith/ .			Date C	onsidered	12/18/2007				

					-			11000 7 01			
U.S. Depar	tment o	f Commerce, Pat	tent and Trader	nark Office	Docket	No.	Serial	No.			
(PTO Form	1449 n	nodified)			AMAT/	5730	10/02	10/023,125			
LIST OF P	ATENT	S AND PUBLICA	TIONS CITED	BY APPLICANT	Applica	Applicant					
				0118	Yoo, et	al.					
(Use sever	al sheet	s if necessary)		APR 0 3 2002 00	Filing D	Filing Date Group					
	1	Examiner Unk	nown 🙀	2	Decem	ber 17, 2001	Unkno	wn			
U.S. Paten	t Docui	nents	- 6	Applicant(s)	_						
Examiner		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Da Appropri				
/F.S./	A81	5.851.849	12/22/98	Comizzoli et al.	438	38	05/22/1				
/F.S./	A82	5,855,675	01/05/99	Doering et al.	118	719	03/03/1				
/F.S./	A83	5,855,680	01/05/99	Soininen et al.	118	719	11/28/1				
/F.S./	A84	5,858,102	01/12/99	Tsai	118	719	02/14/1	998			
/F.S./	A85	5,879,459	03/09/99	Gadgil et al.	118	715	08/29/1	997			
F.S./	A86	5,904,565	05/18/1999	Nguyen, et al.	438	687	07/17/1	997			
/F.S./	A87	5,916,365	06/29/99	Sherman	117	92	08/16/1996				
/F.S./	A88	5,923,056	07/13/99	Lee et al.	257	192	03/12/1998				
/F.S./	A89	5,923,985	07/13/99	Aoki et al.	438	301	01/14/1	997			
/F.S./	A90	5,925,574	07/20/99	Aoki et al.	437	31	04/10/1	992			
/F.S./	A91	5,942,040	08/24/99	Kim et al.	118 .	726	08/27/1	997			
/F.S./	A92	5,947,710	09/07/1999	Cooper, et al.	418	63	06/16/1	997			
/F.S./	A93	5,972,430	10/26/99	DiMeo, Jr. et al	. 427	255.32	11/26/1	997			
oreign Pa	tent Do	ocuments									
Examiner		Document	Date	Country	Class	Subclass	Trans	alation			
nitial		Number					YES	NO			
/F.S./	B25	0 442 490 A1	08/21/1991	EP	C30B	25/02		Х			
/F.S./	B26	0 344 352 A1	12/06/1989	EP	H01L	39/24		Х			
/F.S./	B27	62-091495 A	04/25/1987	JP	C30B	25/02		X			
OTHER AF	RT										
Examiner nitial		Including Author,	, Title, Date, Per	tinent Pages, Etc.							
/F.S./	C11	Klaus, et al., "Ato Sacrificial Strippi 1999).	omic Layer Depo ing Reaction, " T	sition of Tungsten u hin Solid Films 360	sing Seque (2000), Pag	ntial Surface es 145 - 153	Chemistry v , (Accepted	vith a Nov. 16,			
/F.S./	C12			c-Layer Deposition of Physics, Vol 75(11			Films", App	olied			
Examiner	/Fra	ancis Smith/			Date C	onsidered 1	12/18/2007				

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

U.S. Depar	tment of	Commerce, Pat	ent and Trade	mark Office	Docke	et No.	Serial	No.	
(PTO Form	1449 mc	odified)			AMA	7/5730	10/02	3,125	
LIST OF P	ATENTS	AND PUBLICA	TIONS CITE	BYAPPLICANT	Applic	ant			
			/ 0	, 2	Y00,	et al.			
(Use sever	al sheets	if necessary)	APR	0 3 2002 8	Filing	Date	Group		
	E	kaminer Unk	nown 🔀		Dece	mber 17, 200	01 Unkno	own	
U.S. Paten	t Docum	ents	W.	TRADEWINE A PRINCIPLE OF THE PRINCIPLE O					
*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclas	s Filing Da Appropri		
/F.S./	A94	6,001,669	12/14/99	Gaines et al.	438	102	07/21/1	992	
/F.S./	A95	6,015,590	01/18/00	Suntola et al.	427	255.23	11/28/1	995	
/F.S./	A96	6,025,627	02/15/00	Forbes et al.	257	321	05/29/1	998	
/F.S./	A97	6,036,773	03/14/00	Wang et al.	117	97	03/27/1	997	
/F.S./	A98	6,042,652	03/28/00	Hyun et al.	118	719	09/07/1	999	
/F.S./	A99	6,043,177	03/28/00	Falconer et al.	502	4	01/21/1	01/21/1997	
/F.S./	A100	6,124,158	09/26/00	Dautartas et a	I. 438	216	06/08/1	06/08/1999	
/F.S./	A101	6,113,977	09/05/00	Soininen et al.	427	64	09/11/1	997	
/F.S./	A102	6,130,147	10/10/00	Major et al.	438	604	03/18/1	997	
/F.S./	A103	6,139,700	10/31/00	Kang et al.	204	192.17	09/30/1	998	
/F.S./	A104	6,174,377	01/16/2001	Doering, et al.	118	729	01/04/1	999	
/F.S./	A105	6,174,809	01/16/2001	Kang, et al.	438	682	12/15/1998		
Foreign Pa	tent Doc	cuments				_			
*Examiner		Document Number	Date	Country	Class	Subclass	Trans	slation	
Initial		Number					YES	NO	
/F.S./	B28	60-065712 A	04/15/1985	JP	C01B	33/113		X	
/F.S./	B29	03-048421	03/01/1991	JP	H01L	21/302		Х	
/F.S./	B30	03-286531	12/17/1991	JP	H01L	21/316		X	
OTHER AF	RT								
*Examiner Initial				Pertinent Pages, Etc					
/F.S./	C13		t al., "Atomic La 997), pp. 45-50.	yer Epitaxy of Copp	er on Tant	alum", <i>Chemi</i>	cal Vapor De	position,	
/F.S./	C14	Ritala, et al. "A 1995), pp. 273		taxy Growth of TiN	Thin Films	, J. Electroch	em. Soc., 14	2(8) (Aug.	
/F.S./	C15	Elers, et al., "N 468-474.	lbC15 as a prec	ursor in atomic laye	er epitaxy",	Appl. Surf. Sc	ci., Vol. 82/83	3 (1994), p	
Examiner	/Fran	cis Smith/			Date	Considered	12/18/200	17	



	_			•			Sheet 9 of 1	
nt of C	ommerce, Pater	t and Tradema	ark Office	Docket	No.	Se	rial No.	
9 moc	lified)		_	AMAT/	5730	10.	/023,125	
NTS A	ND PUBLICATI	ONS CHED E	PRLICANT	Applica	nt			
		/	<u>(g)</u>	Yoo, et	al.			
eets if	necessary)			Filing D	ate	Gr	oup	
Exa	aminer Unkno	wn E		Decem	ber 17, 200	01 Un	known	
cume	nts	TRA	DFMAN					
	Document Number	Issue Date	Applicant(s) Name	Class	Subclas		Date If opriate	
06	6,200,893	03/13/2001	Sneh	438	685	03/1	1/1998	
07	6,203,613	03/20/2001	Gates, et al.	117	104	10/1	9/1999	
08	6,207,302	03/27/2001	Sugiura, et al.	428	690	03/0	2/1998	
09	6,248,605	06/19/2001	Harkonen, et al	438	29	06/0	2/1999	
10	6,270,572	08/07/2001	Kim, et al.	117	93	08/0	9/1999	
11	6,287,965	09/11/2001	Kang, et al.	438	648	02/2	02/23/2000	
12	6,291,876	09/18/2001	Stumborg, et al	257	632	08/2	0/1998	
13	6,305,314	10/23/2001	/23/2001 Sneh, et al.		118 723 R		7/1999	
14	6,306,216	10/23/2001	Kim, et al.	118	725	07/1	2/2000	
15	6,316,098	11/13/2001	Yitzchaik, et al.	428	339	03/2	3/1999	
16	2001/0000866	05/10/2001	Sneh, et al.	118	723 R	11/2	9/2000	
17	2001/0009140	07/26/2001	Bondestam, et al.	118	725	01/2	01/25/2001	
Docu	ıments			•				
	Document	Date	Country	Class	Subclass	Т	ranslation	
	Number					YES	NO	
1	04-031396 A	02/03/1992	JP	C30B	25/14		Х	
2	06-291048	10/18/1994	JP	H01L	21/205		Х	
3	08-264530	10/11/1996	JP	H01L	21/3205		Х	
4	11-269652	10/05/1999	JP.	C23C	16/44		Х	
	Including Author,	Title, Date, Per	inent Pages, Etc.			•		
6			n-Based Thin Film cosition, 5(2) (Mar			n Chloride	es as	
	Precursors", Che							
7	Martensson, et al	., "Atomic Layer Heptanedion A	Epitaxy of Coppe E/H2 Process*, J	er, Growth & . Electroche	Selectivity em. Soc. ,14	in the Cu 5(8) (Aug	(II)-2,2.6,6- . 1998), pp.	
	9 moccume  eets if Exacume  06 07 08 09 10 11 12 13 14 15 16 17 Doccume  1 2 3 3 4 4	9 modified)  NTS AND PUBLICATI  eets if necessary)  Examiner Unkno ccuments  Document Number  06 6,200,893  07 6,203,613  08 6,207,302  09 6,248,605  10 6,270,572  11 6,287,965  12 6,291,876  13 6,305,314  14 6,306,216  15 6,316,098  16 2001/0000866  17 2001/0009140  Document Number  1 04-031396 A  2 06-291048  3 08-264530  4 11-269652	9 modified)  NTS AND PUBLICATIONS CYCLE  Examiner Unknown  cuments    Document Number   Unknown	Examiner Unknown   Locuments   Document Number   Date   Date	9 modified)  AMAT// NTS AND PUBLICATIONS CYED BY EXPELICANT Application of the property of the	9 modified)  AMAT/5730  AMAT/5730  Applicant Yoo, et al.  Filing Date December 17, 200  Examiner Unknown  Examiner Unknown  Couments  Document Number  Document  Document Number  Document  Document  Document  Document Number  Document  Document Number  Document  Documen	9 modified) NTS AND PUBLICATIONS CYEEN BY REPLICANT  Applicant Yoo, et al.  Examiner Unknown Euments    Document Number   Saue Date   Name   N	

applicant.

--- 10 - 610

								Si	heet 10 of 10		
U.S. Depar	rtment o	f Commerce, P	atent	and Trademar	k Office	Docket	No.	Seria	l No.		
(PTO Form	1449 m	nodified)				AMAT/	AMAT/5730 10/023,125				
LIST OF P	ATENTS	S AND PUBLIC	ATIC	NS CITED BY	APPLICANT	Applica	int	'			
				017	E	Yoo, et	al.				
(Use sever	al sheet	s if necessary)		APR O	3 2002 8	Filing E	Date	Grou	p		
		Examiner U	nknov	vn \3	J.	Decem	ber 17, 200	1 Unkn	own		
U.S. Pater	t Docur	ments		Issue	EMARKE	- 2	1.				
*Examiner Initial		Document Number		Issue Date	Applicant(s) Name	Class	Subclas	s Filing D Appropri			
/F.S./	A118	2001/00115	26	08/09/2001	Doering, et al.	118	729	01/16/2	2001		
/F.S./	A119	2001/00315	62	10/18/2001	Raaijmakers, et al.	438	770	02/22/2	2001		
/F.S./	A120	2001/00341	23	10/25/2001	Jeon, et al.	438	643	04/06/2	2001		
	A121										
	A122										
	A123										
Foreign Pa	atent Do	cuments		•							
*Examiner	r Document		Date Country		Country	Class	Subclass	Tran	slation		
Initial		Number						YES	NO		
/F.S./	B35	2001-62244	03/1	3/2001	JP	B01D	53/34		X		
/F.S./	B36	198 20 147	07/0	1/1999	DE	H01L	21/3205		Х		
/F.S./	B37	196 27 017	01/0	9/1997	DE	H01L	21/283		X		
/F.S./	B38	2 626 110	07/2	1/1989	FR	H01L	39/24		X		
/F.S./	B39	2 692 597	12/2	24/1993	FR	C23C	16/00		Х		
/F.S./	B40	2 355 727A	05/0	2/12001	GB	C23C	16/44		Х		
OTHER A	RT										
*Examiner Initial		Including Author	or, Titl	e, Date, Pertine	nt Pages, Etc.						
/F.S./	C18				on of Ti-Si-N Film 1999), pp. 207-21		rnating Sour	ce Supply",	Mat., Res.		
/F.S./	C19	Bedair, "Atomic	laye	epitaxy deposit	ion processes",	J. Vac. Sci.	Techol. 12(	1) (Jan/Feb	1994)		
/F.S./	C20				of ZnS by a nev J. of Crystal Grov				ssure		
/F.S./	C21				during tungsten a 2, (Accepted De			on SiO2 sur	faces," Thin		
Examiner	/Fra	ncis Smith/				Date C	onsidered	12/18/200	)7		